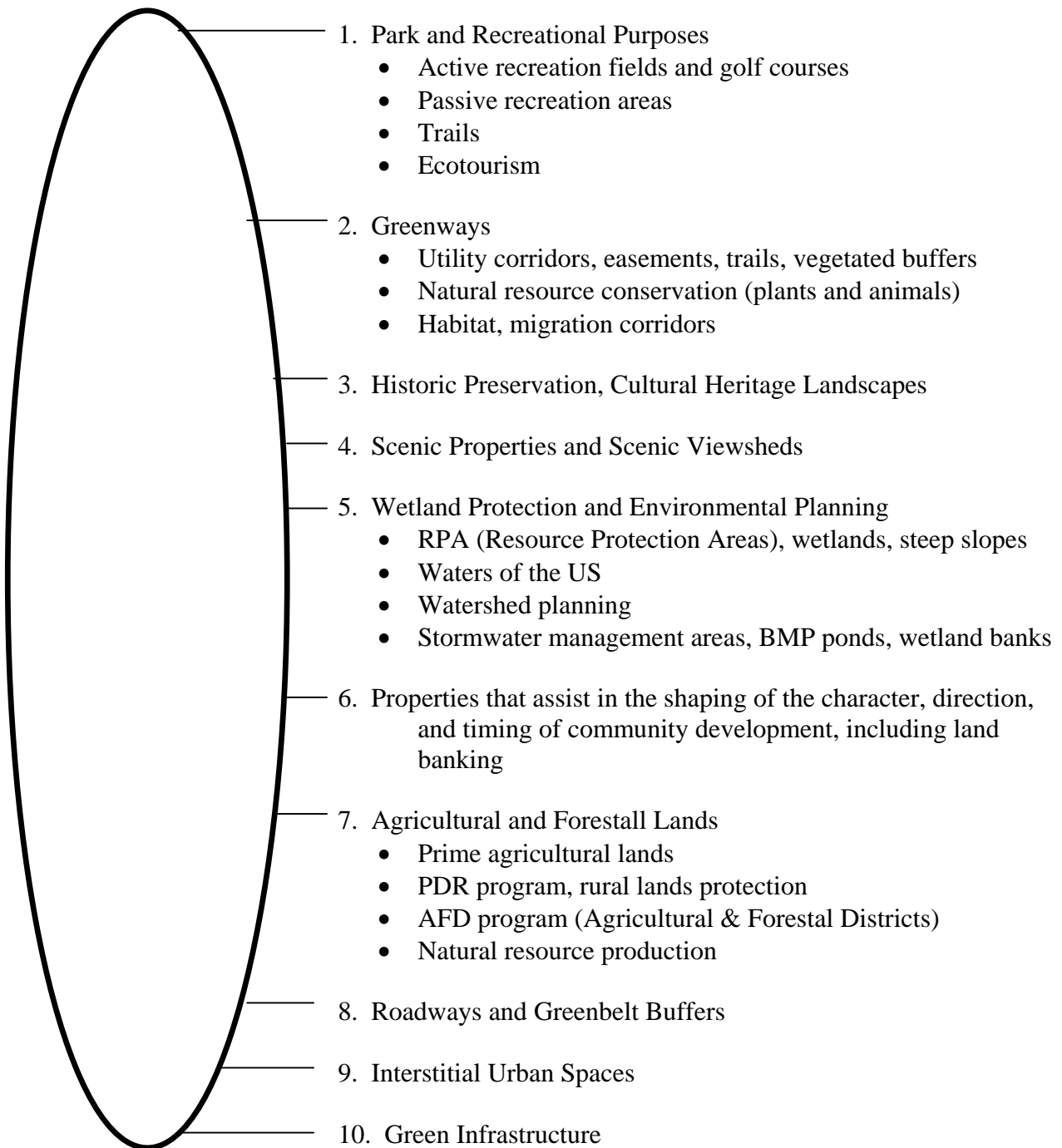


## Appendix 13.1

(From description of the plan, p. 9, and Section 5.4.b.)

### **OPEN SPACE PLANNING**

To protect open spaces, historic features and sensitive natural areas for public benefit. For the primary purpose of developing an open space plan for acquiring open space and securing conservation easements.



## Appendix 13.2

### The Effect of Trails on Property Values and Public Safety

The economic benefits of greenways upon property values documented several positive impacts when greenways are located within proximity to residential and commercial areas. This appendix demonstrates, through two case studies, the effect of trails upon adjacent residential property as it pertains to property values and crime. The terms greenway and trail are used synonymously.

Most Americans want more hiking trails and access to networks of greenways, but they may not necessarily want them in their back yard. The single greatest concern among residents is the perception that trails are a conduit for potential crime in their neighborhood. While these concerns are both valid and appropriate, they need to be tempered by factual data and safety issues tangibly addressed in a partnered design process. These two impact studies were commissioned to examine the effects of trails on residential neighborhoods. Both study areas were within established middle to upper middle class neighborhoods on trails less than 2-miles long. These studies are significant to James City County as they reflect similar circumstances within our community where trails are proposed.

The methodology for the metro-Denver study sought “to determine what effect, if any, the presence of urban trails has had on public safety to property owners who live adjacent to the trail and on property values of homes located within one block of the trail.”<sup>82</sup> The study evaluated the public acceptance of trails and their effect upon neighborhood quality of life. Seven surveys were performed on six study groups that included single-family homeowners, renters, real estate agents, and police. The results are as follows:

- 71% of the residents interviewed believed the trail increased their neighborhood quality of life (p.51).
- Only one respondent attributed vandalism to the existence of the trail. Despite this problem, the family did not feel threatened by the incident or that the trail should be closed (p.51).
- Of the residents living adjacent to the trail, 35% believed the trail would increase their home value, 46% believed they would be unaffected by the trail; 15% were unsure, and only 4-8% felt it wouldn’t benefit them. 46% felt it would make their home easier to sell and 38% would be unaffected (p. 34).
- Of the residents living one block from the trail, 33% believed the trail would increase their home value and 36% felt it would make their home easier to sell; only 3-5% felt it wouldn’t benefit them (p. 40).
- In both instances, 29% of the residents living adjacent to the trail and 17% of the residents living one block from the trail were positively influenced by the trail in their decision to choose a home.
- Of the real estate agents surveyed, 82% said they use trails as a selling point, and 91% believed that homes located next to trails would be easier to sell (p.44), and 73% thought that trails were located in high end, established communities (p.45).

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<sup>82</sup> The Effect of Greenways on Property Values and Public Safety, A joint study by the Conservation Fund and Colorado State Parks, State Trails Program, Leslee T. Alexander, November 1994, p.3.

- All the interviewed officers perceived the trails as very safe and viewed them as an amenity (p.55). None verified whether or not the trail had been used as access to a home during a break-in, but the possibility was considered unlikely since people are most likely to depend on their cars, not bicycles or feet, to commit a crime (p.56).
- It was concluded that urban trails have either a positive or neutral effect on property values (p.60) and their ability to influence the sale of a home (p.62).

The methodology for the Omaha study “sought to examine the impact of existing trail systems, focusing on residents living within one-block of each of three targeted trail segments. Criteria included the desire to examine trails in areas of the city with old and new housing, short versus long term existence of the trail, and trails that are connected to the system versus trails not yet connected.”<sup>83</sup> This survey addressed three distinct issues: property values, public safety, and trail use.

Of the 149 households contacted, 94% lived within one block of the trail, 99.3% were single-family homes, 90.5% were homeowners rather than renters, and 63% were female. The results are as follows:

- All three trails had high percentages of households who had at least one family member who used their local trail, with user percentages on each of the three trails being 67.5%, 86.8% and 100%. Daily or weekly usage per household for all three trail averaged 58.37% (p.8).
- Walking (90.6%) and bicycling (54.3%) were by far the most frequent type of trail use (p.9).
- Factors discouraging use were: No time (62%), No interest (21%), Not safe (11%), Poor access (6%), and Unattractive (0%).
- “81% surveyed felt the nearby trail’s presence would have a positive or no effect on the ease of sale of their home.” 78% felt it would have a positive or no effect on the selling price of their home. “The clear majority of residents (63.8%) who bought their homes after the construction of the trails reported that the trail had positively influenced their purchase decision.” (p.10).
- “Experiences with trail related theft (4%) and property damage (4.7%) were reported infrequently by respondents and most of these incidents were relatively minor in nature.” “Only one of the 149 residents wanted to see the trail along their property closed.” (p.12).
- “Property owners do not appear to have a widespread concern for their safety. Trespassing, theft, and vandalism by trail users were relatively infrequent events.” (Conclusion on p.14)
- Trail impact on the quality of life was: Increased (77%), No impact (14%), Don’t know (7%), or Decreased (2%). There was little indication of a harmful impact except for three respondents, all located on the Keystone Trail, who associated the problems with a nearby skateboard facility. (p.13).
- All neighborhoods reacted positively to the trails, but the responses were higher among residents living near the West Papio Trail, a newer relatively high-end neighborhood.

In conclusion, the results of these two studies were similar in scope and findings:

1. Trail usage was high among residents living near trails, reinforcing the accuracy of the surveys.

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<sup>83</sup> Omaha Recreational Trails, Their Effect on Property Values and Public Safety, Donald L. Greer, with assistance provided by the National Park Service, June 2000,p.4.

2. Of the residents living adjacent to the trail, both studies reported that 81-84% of the respondents believed the trail would have a positive or no effect on the sale of their home, and 78-81% believed the trail would have a positive or no effect on the value of their home.
3. The incident of crime or theft as a result of the trail was negligible, infrequent, and relatively minor in nature, an observation reinforced through interviews with police.
4. As a result of the trail, homeowners believed their quality of life was improved by 71-77%.

Similar studies were performed on the 12-mile Burke-Gilman trail in Seattle, Washington, indicating that property values rose an average of 6% or more, and that 60% of those interviewed believed that being adjacent to the trail would either make their home sell for more or have no effect on the selling price (Seattle Office of Planning, 1987).

Another survey along the Luce Line rail-trail in Minnesota found that 87% of adjacent landowners believed the trail increased or had no effect on their property values; however, 61% of the suburban residential landowners noted an increase in their property value as a result of the trail (Economic Impacts of Protecting Rivers, Trails and Greenway Corridors, National Park Service, RTCA, 1995, p.1-7).

The Rails-to-Trails Conservancy in cooperation with the National Park Service conducted an exhaustive study on trail safety. This survey gathered crime data from 1995 and 1996 on 372 trails was representative of rural, suburban, and urban trails nationwide covering 6,714 miles. The incidence of major crime on trails compared to the national averages provided by the FBI was less than once incident per 1,000,000 population.<sup>84</sup>

An in-house survey performed by James City County staff in April 2002 found similar results. Eight jurisdictions in Virginia and two in Maryland were selected for the study. Crime statistics questions were asked of both Park Administrators (or their designee Trail Coordinator) and Police Departments to ascertain if crime on trails was a problem in their community. All respondents conveyed the sense that trails were free of major crime and generally safe.

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<sup>84</sup> Rail-Trails and Safe Communities, January 1998, Tammy Tracy and Hugh Morris, Rails-to-Trails Conservancy, in cooperation with the National Park Service- Rivers, Trails, and Conservation Assistance Program.

## American Greenways Fact Sheet: Crime and Vandalism<sup>85</sup>

**Issue:** Do recreational trails and other types of greenways cause crime, vandalism, and other disturbances? What evidence is there to support or to alleviate the concerns of adjacent landowners?

**Facts:** There is little evidence to support the fear that greenway trails will produce disturbance to private landowners. In fact the evidence is to the contrary.

- A 1980 study by the Minnesota Department of Natural Resources compared landowners' attitudes on a pair of proposed trails with landowner attitudes along a pair of similar trails already established. On the proposed trails 75% of landowners thought that if a trail was constructed it would mean more vandalism and other crimes. By contrast, virtually no landowners along the two constructed trails (0% and 6%, respectively) agreed with the statement "trail users steal." (Minnesota Department of Natural Resources, 1980)

- A 1987 study of Seattle's Burke-Gilman Trail found little or no crime or vandalism experienced by adjacent property owners. The study surveyed property owners, realtors, and police officers. According to the realtors, property "near" the trail is significantly easier to market and sells for an average of 6% more than similar properties located elsewhere. Nearly two-thirds of adjacent landowners believed that the trail "increased the quality of life in the neighborhood"; not a single resident thought the trail should be closed. (Evaluation of the Burke-Gilman Trail's Effect on Property Values and Crime, Seattle, Washington, Engineering Department, 1987)

- A former opponent of the Burke-Gilman trail (whose home is on the trail) stated that the "trail is much more positive than I expected. I was involved in citizens' groups opposed to the trail. I now feel that the trail is very positive; [there are] fewer problems than before the trail was built; [there were] more litter and beer cans and vagrants [before it was built]." Not a single resident surveyed said that present conditions were worse than prior to construction of the trail.

- A 1992 study by the National Park Service of the impacts of rail-trails on nearby property owners found that "a majority of landowners reported no

increase in problems since the trails opened. That living near trails was better than they had expected it to be, and that living near the trails was better than living near unused railroad lines before the trails were opened." (Impact of Rail-Trails, National Park Service, 1992).

- Comments from adjacent landowners interviewed for the NPS study included the following:

"Vandalism, robbery, and safety concerns I originally had were unfounded." (Landowner on California's Lafayette/Moraga Trail)

"I was very opposed to the idea at first, fearing that it would be used by motorcyclists, but I am very pleased with the trail-it provides a safe alternative to using the highway for joggers and bicyclists, and it gives me a safe and comfortable place for my walks." (Adjacent landowner on Florida's St. Mark's Trail)

"We are a small town and most everyone uses the trail at one time or another. The city of Durango has no bad comments to make on the trail; they all like it very much." (Public official on Iowa's Heritage Trail)

- A 1988 survey of greenways in several states has found that "such parks typically have not experienced serious problems regarding . . . vandalism, crime, trespass, [or] invasion of privacy . . . Prior to developing the park facilities, these concerns were strongly voiced in opposition to proposed trails. After park development, however, it was found that fears did not materialize . . . concerns expressed by the neighbors opposed . . . have not proven to be a post-development problem in any of the parks surveyed." ("A Feasibility Study for Proposed Linear Park," Oregon Department of Transportation, Parks and Recreation Division, May 1988)

- A 1990 study by the Appalachian Trail Conference of crimes on the Appalachian Trail found that despite use by 3-4 million persons per year, there were only 0.05 crimes per 100,000, or 1 in 2 million. This means you are more likely to be struck by lightning or victimized in your home than as a hiker on the Appalachian Trail. (Source: Appalachian Trail Conference, Harpers Ferry, West Virginia)

For additional information contact the American Greenways Program, The Conservation Fund, 1800 North Kent Street, Suite 1120, Arlington, VA 22209 (Phone: 703-525-6300; fax: 703-525-4610).

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<sup>85</sup> Greenways, Charles Flink and Robert Searns, in partnership with the Conservation Fund, 1993, p.70.

### **Appendix 13.3**

#### Summary of 1997 Comprehensive Plan Greenway Recommendations

The following comments/recommendations that specifically pertain to greenway planning were gleaned from the 1997 Comprehensive Plan. Many of these objectives were also ‘produced’ by citizens during the focus group presentations

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Public Facilities/Parks – Residents of the Primary Service Area should be located within 1.5-miles of a neighborhood park and 3-miles of a community park. The County should focus on opportunities to acquire and develop a series of special-purpose parks and greenways that provide a wider variety of recreational, cultural, and educational opportunities for County residents. Neighborhood playgrounds (parks) should be located within 5-minutes walking distance of residential areas. (p.20,21)

Recreation - Pursue development of an integrated network of linear parks, trails, bikeways, sidewalks and/or greenways that connects with a regional system; maintain existing open spaces and develop park facilities that are more natural in character; establish a greenway system consistent with the Chesapeake Bay Preservation Ordinance, complementary to existing and planned sidewalks and bikeways, and coordinated with the greenway plans of adjacent localities and interested organizations; pursue the establishment of a regional greenway trust or foundation to accept donations of private land; encourage developers to dedicate greenways to the regional greenway trust or foundation for the preservation of open space; seek transportation funds and encourage developers to construct sidewalks and bikeways for transportation and recreation purposes; encourage developers to dedicate right-of-way and construct a bikeway within a greenway along Powhatan Creek between Jamestown Road and News Road, also between Powhatan Creek and Greensprings Road along Route 5; coordinate with the National Park Service to establish a bikeway along the Colonial Parkway; coordinate bikeway systems with neighboring jurisdictions through the Historic Triangle Bicycle Advisory Committee; pursue the development of a hiking trail along the James River greenway corridor between Carter’s Grove and the Chickahominy River; recommend proffers for new residential development in order to obtain greenways. (p.27, 28)

Housing - Encourage residential development that provides a balance of housing types, open space preservation, recreational amenities, and supports pedestrian and bicycle travel. (p.38)

Environment - Protect the environment and conserve resources for future use; identify environmentally sensitive areas and financial resources (or other means) to acquire conservation easements or clear title; develop and enforce zoning regulations that ensure preservation of sensitive natural areas to the maximum extent possible; provide incentives and regulatory measures to improve air quality by promoting reduction of automobile dependency, alternative modes of transportation, and the attraction and development of clean air industries; educate the public about voluntary techniques to preserve and protect sensitive lands and other open spaces; identify specific existing and potential uses of County streams and rivers, and protect the quality of these surface waters; encourage the development of educational and passive recreational access to special environmental and historical areas. (p. 50, 51)

Transportation - Encourage development of landscaped roadways designed to enhance the County's image; improve the planned function and character of roadways; develop a transportation system that facilitates a variety of transportation modes in order to reduce congestion, pollution, energy consumption, including provisions for sidewalks, and bikeways; include bikeways and/or pedestrian facilities within major developments and elsewhere in the County, especially connecting residential and non-residential areas with adjoining residential neighborhoods... and amend the Zoning Ordinance to accomplish this; encourage interconnection of subdivisions to allow for emergency vehicle and pedestrian access; include integration of bikeways and pedestrian facilities into Primary and Secondary Road Plans; encourage mixed use land strategies and promote walking and bicycling as means of transportation; encourage pedestrian circulation by providing well lit and clearly marked crosswalks; explore the availability of easements of property traversed by utility companies in order to accommodate bikeways and greenways with the Regional Bikeway Plan; update the JCC Sidewalk Plan and ensure consistency with the Bikeway Plan to avoid duplication of similar facilities. (p. 62, 63)

Community Character - Those attributes specifically mentioned as maintaining and improving the aesthetics and character of the community include Community Character Corridors (formerly "greenbelts"), greenways, open space, and protecting archaeological and historic sites.

## **Appendix 13.4**

### Summary of 1993 Parks and Recreation Comprehensive Master Plan recommendations for Greenway, Bikeway and Trail Corridors

#### General Comments

1. Develop a Powhatan Creek Greenway between Jamestown Road and News Road.
2. Coordinate with the National Park Service for a bikeway along the Colonial Parkway.
3. Establish a greenway system based on the Chesapeake Bay Preservation Ordinance's Resource Protection Areas and the County's Greenbelt Road Policy, and coordinated with the plans of adjacent localities and interested organizations.
4. Pursue the development of a James River Greenway between Carter's Grove Plantation and the Chickahominy River.

#### 1993-1997

5. Mid County Park to the Community Center to Lafayette High School via Ironbound/Longhill Road.
6. Lower County Trail from James River Elementary to the Colonial Parkway.
7. Boy Scout property to Little Creek Reservoir Park via Cranston's/Little Creek Dam Roads.
8. Route 5 to Longhill Road along Centerville Road.
9. From Ironbound to Longhill along Route 199 (through surplus Eastern State property).
10. Little Creek and Toano School loop via Chickahominy/Forge Roads.
11. Lafayette High School to Boy Scout Camp via Longhill/Centerville Roads.
12. Mid County Park to Centerville Road via Ironbound Road/Route 5.

#### 1997-2002

13. Ironbound to Longhill
14. Chickahominy/Forge Roads: Complete loop between Little Creek and Toano School
15. Longhill/Centerville Roads: Lafayette High School to Boy Scouts
16. Ironbound Road/Route 5: Mid County Park to Centerville Road
17. Greensprings Road: Route 5 to Colonial Parkway
18. News Road: Centerville to Ironbound Roads
19. Powhatan Creek: News Road to Jamestown Road
20. Large District Park-5 miles of hiking/walking paths

#### 2002-2007

21. Centerville Road to Chickahominy River
22. Route 5 to James River
23. Upper County Park to York River State Park
24. Large District Park- 5 additional miles of hiking/walking paths



**Appendix 13.5 Benefits- Supporting Data**

Reserved for future use

## **Appendix 13.6<sup>86</sup> Implementation- Supporting Data**

### **Regulatory Options**

The following regulatory tools can help meet the challenges of projected urban and suburban growth and, at the same time, conserve and protect greenway resources. While many of the methods below can be used, others may require changes in state law. Some of the methods may require zoning ordinances that do not currently exist or do not exist for local jurisdictions. Therefore, the use of some of these methods would require ordinance revisions and staff resources to implement the new requirements. The mandatory dedication of parkland and greenways should be supported through the County Comprehensive Plan and Development Ordinances.

#### **13.6.a Facility Fees**

The purpose of the facility fee is to help the County meet the anticipated cost of additional land and development of facilities to serve new growth and development in the County. By collecting fees, the county can purchase land or develop new facilities where the greatest need is determined. This flexibility promotes greater effectiveness in meeting park and open space needs. Further, the facility fee approach ensures that all residential developments contribute in meeting these needs.

#### **Impact Fees**

Impact fees are monetary one-time charges levied by a local government on new development to offset some of the cost of providing public facilities for new development. Unlike subdivision exactions, impact fees can be applied to finance facilities located outside a specific land use development and can account for the impact of a development on facilities beyond the boundary of the development. The purpose of impact fees is not to raise revenue, but to ensure that adequate capital facilities and infrastructure services will be provided to serve and protect the public. They can be levied through the subdivision or building permit process. For more information, refer to Appendix 13.6.b.

#### **Transfer Fees**

This locally imposed tax on all real estate land transfers within a jurisdiction is not currently available in Virginia. Tax revenues, typically 1% of the sale, are dedicated to a variety of land preservation programs. If specific environmental or agricultural lands are to be protected, an additional transfer tax can be levied as a conversion tax on environmental or agricultural land that will be assessed with development in mind.

#### **Buffer/Transition Zones**

This mechanism recognizes the problem of reconciling different, potentially incompatible, land uses by preserving greenways that function as buffers or transition zones between uses. Care must be taken to ensure that use of this mechanism is reasonable, is narrowly and directly focused, and will not destroy the value of a property. If the buffer is supposed to accommodate a trail along a road, the buffer must be designed with sufficient width to account for drainage systems, grading, and recommended trail improvements. Examples of buffer zones include:

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<sup>86</sup> Appendix XXXX, in its entirety, was copied from the Roanoke Greenway Master Plan, produced by Greenways, Inc.

- Community Character Corridors (CCC)
- Greenbelt buffers to soften roadway impacts on adjacent neighborhoods
- Zoning ordinance buffer requirements for property line setbacks
- Resource Protection Area (RPA) buffers along waterways and wetlands
- The Primary Service Area (PSA) is an urban growth boundary designed to limit sprawl development into rural areas, also considered transitional areas. Greenways can help buffer the PSA and other transitional areas around some of our older communities protected under the Community Character Corridor ordinance.

#### Conditional Zoning

Also known as conditional rezoning, this mechanism can be used to create public and private greenways through special conditions voluntarily proffered by the property owner requesting a rezoning. Conditional rezoning allows the owner to perform some act or make site improvements that make the proposed rezoning more compatible with the surrounding area. This mechanism allows planning officials to accommodate property owners, to not conflict with the Land Use Plan or Comprehensive Plan, to provide additional benefits such as recreational facilities, landscape buffers, open spaces, and to promote greenways within the jurisdiction.

#### Special Use Permits

In order to provide good zoning practices, certain adjustments in land development requested by the jurisdiction, or the property owner, may be considered that preserve, protect or enhance the nature and condition of adjacent uses, and the probable effect upon them by the proposed exemptions. Reducing adverse effects are mitigated through special characteristics, enhanced design, location, construction, and any other aspects deemed to improve the overall quality of design or benefit the character of the district or adjacent districts. Greenways may also be included as part of these enhanced design negotiations.

#### Density Bonuses

One regulatory method currently used in James City County is incentive zoning - also termed density bonuses. Under this mechanism, developers are encouraged to provide public amenities within the community (such as trails, greenways, open space, parkland, or scenic viewshed buffers) in exchange for greater densities than normally allowed by the zoning ordinance.

#### Conservation Overlay Zones

This mechanism could allow local jurisdictions to place a conservation overlay zone in a location identified for greenway development. Conservation overlay zones allow for a closer grouping of buildings on one part of a property so that the remaining open land can be conserved and/or used for recreation (also called "cluster zoning"). This would require a conservation overlay zoning ordinance. James City County already has a cluster ordinance in place so developers can increase their density in exchange for stricter standards.

#### Resource Overlay Zones or Districts

By establishing resource overlay zones through local zoning ordinances, area governments can protect undeveloped land, especially near sensitive natural resources such as streams and rivers, or place restrictions on development activity in and around important historic sites. This method imposes through local zoning additional development standards or restrictions in specific zones. While this method may not require greenway development, it could preserve critical greenway

lands from further urban encroachment. Examples of resource overlay zones in the County include:

- Agricultural and Forestal Districts (AFD's)
- Resource Protection Areas (RPA)
- Powhatan Creek Watershed Planning Study
- Governor's Land Archaeological District
- Parklands, scenic viewshed easements, wildlife habitat, threatened and endangered species, floodplains, environmental buffer areas, and archaeological/historic districts.

#### Chesapeake Bay Ordinance

This ordinance, adopted in 1990 to protect RPA wetlands, steep slopes greater than 25%, highly erodible soils, riparian buffers, and uplands, offers the County the best means of greenway protection for environmentally sensitive areas. Resource Protection Areas create development restrictions requiring all new developments to set aside 40% of their land area as mandatory open space. Most of this land is undevelopable (RPA and RPA buffer) or marginally developable, but still suitable for greenways and trails. These protected linear open spaces are perfect greenway corridors, but will require easements because they are still owned by the landowner.

#### Planned-Unit Development Ordinances

A PUD ordinance enables jurisdictions to require a certain percentage of land area to be set aside for recreation or for common open space. This zoning ordinance, combined with a greenway plan that identifies a proposed route within the property, can be used to secure greenway lands, provided environmental protection aims are achieved.

#### Subdivision Ordinances

The subdivision ordinance is a condition of subdivision approval, which requires the developer to provide for certain public improvements at its own expense. Section 15.2-2241 (A) (5) authorizes the exaction of certain improvements ("any right-of-way located within any subdivision, ... any street, curb, gutter, sidewalk, bicycle trail, drainage or sewer system, water line as part of a public system or other improvement dedicated for public use"). If authorized by local ordinance, this requires the developer to dedicate part of its land for public use or to construct at its expense, and in accordance with defined standards, needed facilities serving the subdivision. The courts permit those facilities serving the needs of the subdivision. The courts also permit the use of on-site mandatory dedications and exactions when the need for particular facilities can be closely related to the development.

Section 15.2-2243 authorizes developers to pay for certain off-site improvements for sewage, water, and drainage facilities. There are statutory limitations and guidelines for calculating the amount of a developer's pro-rata share of these improvements. Section 15.2-2242 authorizes localities to include in local subdivision ordinances reasonable provisions for voluntary funding of off-site road improvements.

#### Agricultural and Forestal Districts (AFDs)

AFD's are a land conservation and preservation effort that can only be enacted by a landowner. Through this special district, the landowner agrees to limit development on the property for the life of the agreement, which is usually 4-10 years. This method can be used to preserve future

greenway lands in developing areas, particularly where the landowner desires to keep the property intact in the years prior to greenway development. In return, the property owner is taxed on the use of the land, rather than its fair market value.

#### Reservation of Land

A reservation of land does not involve any transfer of property rights but simply constitutes an obligation to keep property free from development for a stated period of time. Reservations are normally subject to a specified period of time, such as 6 or 12 months. At the end of this period, if an agreement has not been reached to transfer certain property rights, the reservation expires.

### 13.6.b Impact Fees

Impact fees are monetary one-time charges levied by a local government on new development to offset some of the cost of providing public facilities for new development. Unlike subdivision exactions, impact fees can be applied to finance facilities located outside a specific land use development and can account for the impact of a development on facilities beyond the boundary of the development. The purpose of impact fees is not to raise revenue, but to ensure that adequate capital facilities will be provided to serve and protect the public. They can be levied through the subdivision or building permit process.

The Virginia General Assembly has granted certain local governments (any county over 500,000 population, cities and counties adjacent thereto, cities contiguous to such adjacent counties and cities, and towns therein) limited authority to assess impact fees for "road improvements," defined to include construction of new roads or improvements or expansion of existing roads to meet increased demand attributable to new development. This legislation is quite specific as to the manner in which the impact fees are assessed and used. Current state law would have to be amended to authorize the use of impact fees for greenway purposes in James City County.

#### The Dolan vs. Tigard Supreme Court Case and its Effect on Greenways

In July 1994, the United States Supreme Court in the case of Dolan v Tigard examined the circumstances under which a property owner could be required to transfer land to a local government, with no monetary compensation, for a bicycle-pedestrian trail, as a condition of receiving a permit for enlarging an existing store. The Dolan family, owners of a local plumbing supply store in Tigard, Oregon, were required by the City to dedicate for public use a 15-foot strip of land for a segment of the City's planned greenway and bicycle/pedestrian corridor as a condition of receiving a permit to enlarge the store. Conditions such as these are commonly called "development exactions" or "dedications" and are used extensively by local governments throughout the nation as a mechanism for keeping pace with rapid population growth and land use development. Local governments are burdened with the responsibility of providing services, facilities, and infrastructure to new developments and in the last ten years have begun to rely on exactions as a method for "pay-as-you-go" community growth.

In 1987 the Supreme Court decided Nollan vs. California Coastal Commission, holding that an exaction must be directly related, both in nature and extent, to the impact of the proposed development. The Commission granted a permit to the Nollans to replace a small bungalow on

their beachfront lot with a larger house upon the condition that they allow the public an easement to pass along their beach, which was located between two public beaches. The Nollans challenged the condition to the permit as an unconstitutional taking. The Court agreed, holding that the imposition of the beach access easement condition could not be treated as a reasonable exercise of its land use regulatory power since the condition did not directly serve the public purposes related to the building permit requirement. The Court likened the requirement for this condition to "an out-and-out plan of extortion." There must be a direct relationship between the reason for the condition and what is being exacted.

Nollan cited Board of Supervisors vs. Rowe, a Virginia exaction case in support of its decision. In Rowe the local zoning ordinance required landowners, as a condition to the right to develop their land, to dedicate a portion of their property for the purpose of providing a service road (including curbs, sidewalk and landscaped median strip), which was substantially generated by public traffic demands, rather than by the proposed development. The Virginia Supreme Court found that the local ordinance constituted an unconstitutional "taking" since the enabling legislation did not authorize this "taking" and that it violated Article 1, Section 11 of the Constitution of Virginia. This "taking" was not so much for the benefit of the properties from which the land was to be acquired, as it was for a more general public good.

After this decision the Attorney General for the Commonwealth of Virginia opined that subdividers may not be required to dedicate land for public park, school, or recreation purposes or to make cash payments in lieu thereof, as a precondition for subdivision plat approval, since these facilities are not specifically authorized by Section 15.1-466.

Dolan added another requirement: that the exaction must be "roughly proportional" to the impact of the new development. In applying this test, the Supreme Court first recognized that a pedestrian/bicycle trail provides a useful alternative means of transportation for workers and shoppers that could serve to reduce automobile congestion and improve traffic flow. Nonetheless, the Court held that the dedication was a taking, in the case of Dolan, because Tigard had failed to make an "individualized determination" that the trail would or was likely to offset some of the additional traffic.

### 13.6.c Funding Mechanisms

The funding sources cited below represent additional major greenway funding opportunities that were not included in Section 11.2. This supplemental list provides an outline to help organize various means of funding for greenway and trail implementation.

#### **Federal Government Funding Sources**

Some federal programs offer financial aid for projects that aim to improve community infrastructure, transportation, housing, and recreation programs. Some of the federal programs that can be used to support the development of greenway systems include:

The Transportation Efficiency Act (TEA-21)

The primary source of federal funding for greenways is through TEA-21, which is authorized through Fiscal Year 2003 to fund \$18.5 million per year for intermodal transportation enhancements. Many sections of TEA-21 support the development of bicycle and pedestrian transportation corridors. Those sections that apply to the creation of greenway systems include:

**Section 1302: Symms National Recreational Trails Fund Act (NRTFA)**

A component of TEA-21, the NRTFA is a funding source to assist with the development of non-motorized and motorized trails. In Fiscal Year 1994, Congress did not fund this national program, and it has become apparent that this funding source is not as stable as the national trail community once envisioned it. In 1993, Congress appropriated only \$7.5 million of a \$30 million apportionment. TEA-21 uses funds paid into the Highway Trust Fund from fees on non-highway recreation fuel used by off-road vehicles and camping equipment.

Motorized and non-motorized trail projects receive a 30% share of annual appropriations. Forty percent of the appropriation must be spent on projects that accommodate both user groups. States can grant funds to private and public sector organizations. NRTFA projects are 100% federally funded during the first three years of the program. Beginning in 1995, grant recipients must provide a 20% match. Projects funded must be consistent with the Statewide Comprehensive Outdoor Recreation Plan.

**Section 1047: National Scenic Byways Program**

This component of TEA-21 is designed to protect and enhance America's designated scenic roads. Money is available for planning, safety and facility improvements, cultural and historic resource protection, and tourism information signage. Bicycle and pedestrian facilities can be developed in conjunction with scenic roadway projects. Some states with Scenic Byway Programs have developed greenways in conjunction with this initiative.

**Section 1008: Congestion Mitigation and Air Quality Improvement (CMAQ) Program**

The CMAQ program was created to reduce congestion on local streets and improve air quality. Funds are available to urban communities designated as "non-attainment" areas for air quality, meaning the air is more polluted than federal standards allow. Since the County is not currently classified as a non-attainment area for air quality, it is not eligible for this funding. However, this funding source should be considered in the event that the air quality in the County or adjacent HRPDA jurisdictions deteriorates. The Virginia Department of Transportation, Federal Highway Administration, and Environmental Protection Agency administer the program. A grant recipient must demonstrate that its project will improve air quality throughout the community. Funding requires a 20% local match.

**Community Development Block Grant Program**

The US Department of Housing and Urban Development (HUD) offers financial grants to communities for neighborhood revitalization, economic development, and improvements to community facilities and services, especially in low and moderate-income areas. Several communities have used HUD funds to develop greenways, including the Boscobel Heights' "Safe Walk" Greenway in Nashville, Tennessee.

**Land and Water Conservation Fund (LWCF) Grants**

This Federal funding source was established in 1965 to provide "close-to-home" park and recreation opportunities to residents throughout the United States. Money for the fund comes

from the sale or lease of nonrenewable resources, primarily federal offshore oil and gas leases and surplus federal land sales. LWCF grants can be used by communities to build a variety of park and recreation facilities, including trails and greenways. LWCF funds are distributed by the National Park Service to the states annually. Communities must match LWCF grants with 50% of the local project costs through in-kind services or cash. All projects funded by LWCF grants must be used exclusively for recreation purposes, in perpetuity.

#### Chesapeake Bay Gateways Program

The Chesapeake Bay Gateways program network is an interconnected system of parks, refuges, museums, historic communities, and water trails in the bay watershed, each telling a part of the Bay story. The program is administered through the National Park Service and the Chesapeake Bay Program. James City County received a \$26,100 grant in 2002 for development of blueway facilities at the Powhatan Creek Water Access Park on Jamestown Road. For more information, contact [www.baygateways.net](http://www.baygateways.net)

#### Conservation Reserve Program

The US Department of Agriculture (USDA), through its Agricultural Stabilization and Conservation Service, provides payments to farm owners and operators to place highly erodible or environmentally sensitive landscapes into a 10-15 year conservation contract. The participant, in return for annual payments during this period, agrees to implement a conservation plan approved by the local conservation district for converting sensitive lands to less intensive uses. Individuals, associations, corporations, estates, trusts, cities, counties and other entities are eligible for this program. Funds from this program can be used to fund the maintenance of open space and non-public-use greenways, along bodies of water and ridgelines.

#### Wetlands Reserve Program

The US Department of Agriculture provides direct payments to private landowners who agree to place sensitive wetlands under permanent easements. This program can be used to fund the protection of open space and greenways within riparian corridors.

#### Watershed Protection and Flood Prevention (Small Watersheds) Grants

The USDA Natural Resource Conservation Service (NRCS) provides funding to state and local agencies or nonprofit organizations authorized to carry out, maintain and operate watershed improvements involving less than 250,000 acres. The NRCS provides financial and technical assistance to eligible projects to improve watershed protection, flood prevention, sedimentation control, public water-based fish and wildlife enhancements, and recreation planning. The NRCS requires a 50% local match for public recreation, and fish and wildlife projects.

#### Urban and Community Forestry Assistance Program

The USDA provides small grants of up to \$10,000 to communities for the purchase of trees to plant along city streets and for greenways and parks. To qualify for this program, a community must pledge to develop a street-tree inventory; a municipal tree ordinance; a tree commission, committee or department; and an urban forestry-management plan.

#### Small Business Tree Planting Program

The Small Business Administration provides small grants of up to \$10,000 to purchase trees for planting along streets and within parks or greenways. Grants are used to develop contracts with local businesses for the plantings.



#### Americas Treeways Program

Seedling trees are supplied free of charge for installation by volunteers or service companies on public lands. Additional grant funds are available to help defray the costs of potting soil and other supplies.

#### Economic Development Grants for Public Works and Development of Facilities

The US Department of Commerce, Economic Development Administration (EDA), provides grants to states, counties and cities designated as redevelopment areas by EDA for public works projects that can include developing trails and greenway facilities. There is a 30% local match required, except in severely distressed areas where federal contribution can reach 80%.

#### Design Arts Program

The National Endowment for the Arts provides grants to states and local agencies, individuals, and nonprofit organizations for projects that incorporate urban design, historic preservation, planning, architecture, landscape architecture and other community improvement activities, including greenway development. Grants to organizations and agencies must be matched by a 50 % local contribution. Agencies can receive up to \$50,000.

### **Grants through Private Foundations and Corporations**

Many communities have solicited greenway funding from a variety of private foundations and other conservation-minded benefactors.

#### American Greenways DuPont Awards

The Conservation Fund's American Greenways Program has teamed with the DuPont Corporation and the National Geographic Society to award small grants (\$250 to \$2000) to stimulate the planning, design, and development of greenways. These grants can be used for activities such as mapping, conducting ecological assessments, surveying land, holding conferences, developing brochures, producing interpretive displays and audio-visual materials, incorporating land trusts, building trails and greenway facilities, and other creative projects. Grants cannot be used for academic research, institutional support, lobbying, or political activities. The awards are intended to:

- Develop action-oriented greenway projects
- Assist grassroots greenway organizations
- Leverage other money for greenway development; and
- Recognize and encourage greenway organizations

Grant recipients are selected according to the following criteria:

- The importance of the project to local greenway development efforts
- The extent to which the grant will result in matching funds or other support for public or private sources
- Demonstrated community support for the project
- Likelihood of tangible results
- Capacity of the organization to complete the project; and

- The degree to which the project serves as a model for planning and developing greenways

#### REI Environmental Grants

REI (Recreational Equipment Incorporated) awards grants to organizations interested in protecting and enhancing natural resources for outdoor recreation. Grants up to \$500 are available through this program and can be used for:

- Preservation of wildlands and open space
- Advocacy-oriented education for the general public on conservation issues
- Building the membership base of a conservation organization
- Direct citizen action (lobbying) campaigns for public land and water recreation issues, and
- Projects that serve to organize a trails constituency or enhance the effectiveness of a trail organization's work as an advocate

#### *Walking Magazine* Trail Restoration Fund

*Walking Magazine*, hoping to encourage more volunteer efforts among trail users, established this fund for the restoration of urban, suburban or rural walking trails. The magazine provides small grants, generally from \$200 to \$500, to help walking clubs and other groups purchase trail maintenance equipment or supplies.

#### Coors Pure Water 2000 Grants

Coors Brewing Company and its affiliated distributors provide funding and in-kind services to grassroots organizations that are working to solve local, regional, and national water-related problems. Coors provides grants, ranging from a few hundred dollars to \$50,000, for projects such as river cleanups, aquatic habitat improvements, water quality monitoring, wetlands protection, pollution prevention, water education efforts, groundwater protection, water conservation, and fisheries. (Does Busch have a similar program).

#### World Wildlife Fund Innovative Grants Program

This organization awards small grants to local, regional, and statewide non-profit organizations to help implement innovative strategies for the conservation of natural resources. Grants are offered to support projects which:

- Conserve wetlands,
- Protect endangered species,
- Preserve migratory birds,
- Conserve coastal resources, and
- Establish and sustain protected natural areas, such as greenways

Innovation grants can help pay for administrative costs including planning, technical assistance, legal and other costs to facilitate the acquisition of critical lands, retaining consultants and other experts, and preparing visual presentations and brochures or other conservation activities. The maximum award for a single grant is \$10,000.

## Appendix 13.7

### Trail Etiquette

Help reduce trail conflicts by observing the following trail regulations:

- The [*Greensprings Trail*] prohibits bikes and motorized vehicles (except electric wheelchairs). (*Specify permitted uses and restrictions*)
- Observe Yield Trail signs. Stay to the right except when passing.
- Do not block the trail. Respect other trail users.
- Give a clear warning signal when passing. Offer a polite “left” to warn users ahead that you are behind them and you intend to pass.
- Travel at a reasonable speed in a safe and predictable manner.
- As a courtesy to trail neighbors, do not loiter near adjacent homes.
- Please refrain from loud noises that distract birds and bird watchers.
- Observe environmental caution signs during nesting season.
- Do not disturb plants or animals.

### *County Ordinances:*

- Hours of operation are from dawn to dusk. Trail use at night is in violation of Park Ordinances and will be prosecuted as trespassing.
- Keep all pets on an 8-foot leash and under complete control.
- Alcohol and illegal drugs are not permitted on the trail.
- Firearms, fireworks, and fires are not permitted on the trail.
- Hunting is not permitted.

***Leave no trace.***

***Leave only footprints. Take only memories.***

***Report any violations to JCC Parks and Recreation 259-3200  
or to JCC Police at 253-1800***

## **12 Principles for Minimizing Conflict**<sup>87</sup>

1. Recognize conflict as goal interference- do not treat conflict as an inherent incompatibility among different trail activities, but rather as goal interference attributed to another's behavior.
2. Provide adequate trail opportunities- offer adequate trail mileage and provide opportunities for a variety of trail experiences to reduce congestion and provide optimum conditions best suited to the desired experience.
3. Minimize the number of contacts in problem areas- each contact has the potential for conflict, so reduce the number of contacts whenever possible, especially in congested areas, and provide separate trails when necessary.
4. Involve users as early as possible- identify present and future users of the trail and involve them in the process of avoiding and resolving conflicts as early as possible.
5. Understand user needs- determine the motivations, desired experiences, norms, setting preferences, and other needs of present and future trail "customers."
6. Identify the actual sources of conflict- help users identify specific tangible causes of conflicts and avoid emotions and stereotypes.
7. Work with affected users- work with all parties to reach mutually agreeable solutions.
8. Promote trail etiquette- actively and aggressively promote responsible trail behavior using educational materials and trailhead signs to get information into users' hands as early as possible.
9. Encourage positive interaction among different users- providing positive interactions both on and off the trail will break down barriers and stereotypes, and build understanding, good will, and cooperation.
10. Favor "light-handed" management- using "light-handed approaches" will achieve most objectives. This is essential in order to provide the freedom of choice and natural environments.
11. Plan and act locally- whenever possible, address issues regarding multiple-use trails at the local level.
12. Monitor progress- monitor the effectiveness of decisions made and programs implemented.

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<sup>87</sup> Conflicts on Multiple-Use Trails, Roger L. Moore, sponsored by the Federal Highway Administration, August 1994.